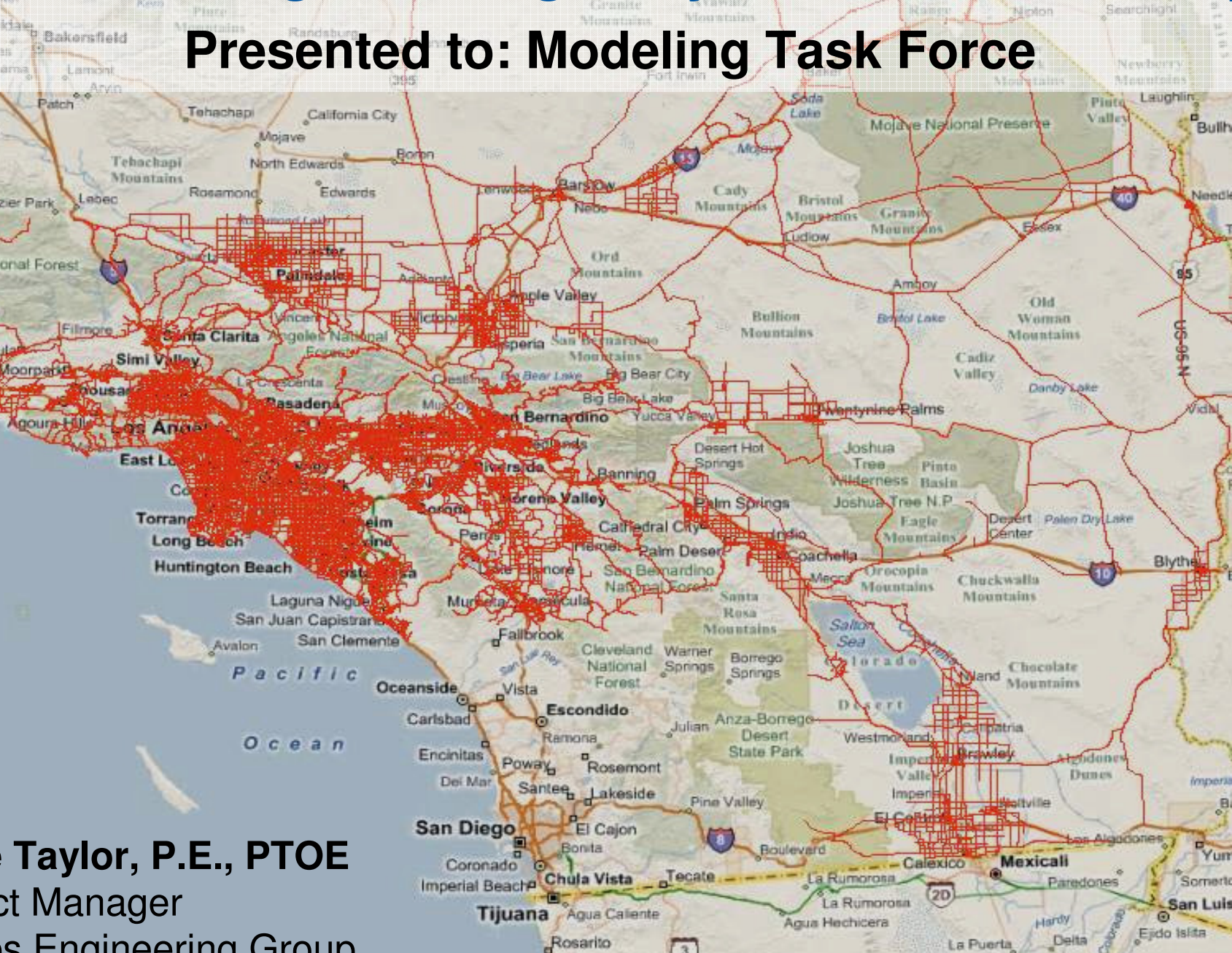


Presented to: Modeling Task Force

SCAG – Regional Highway Network Inventory

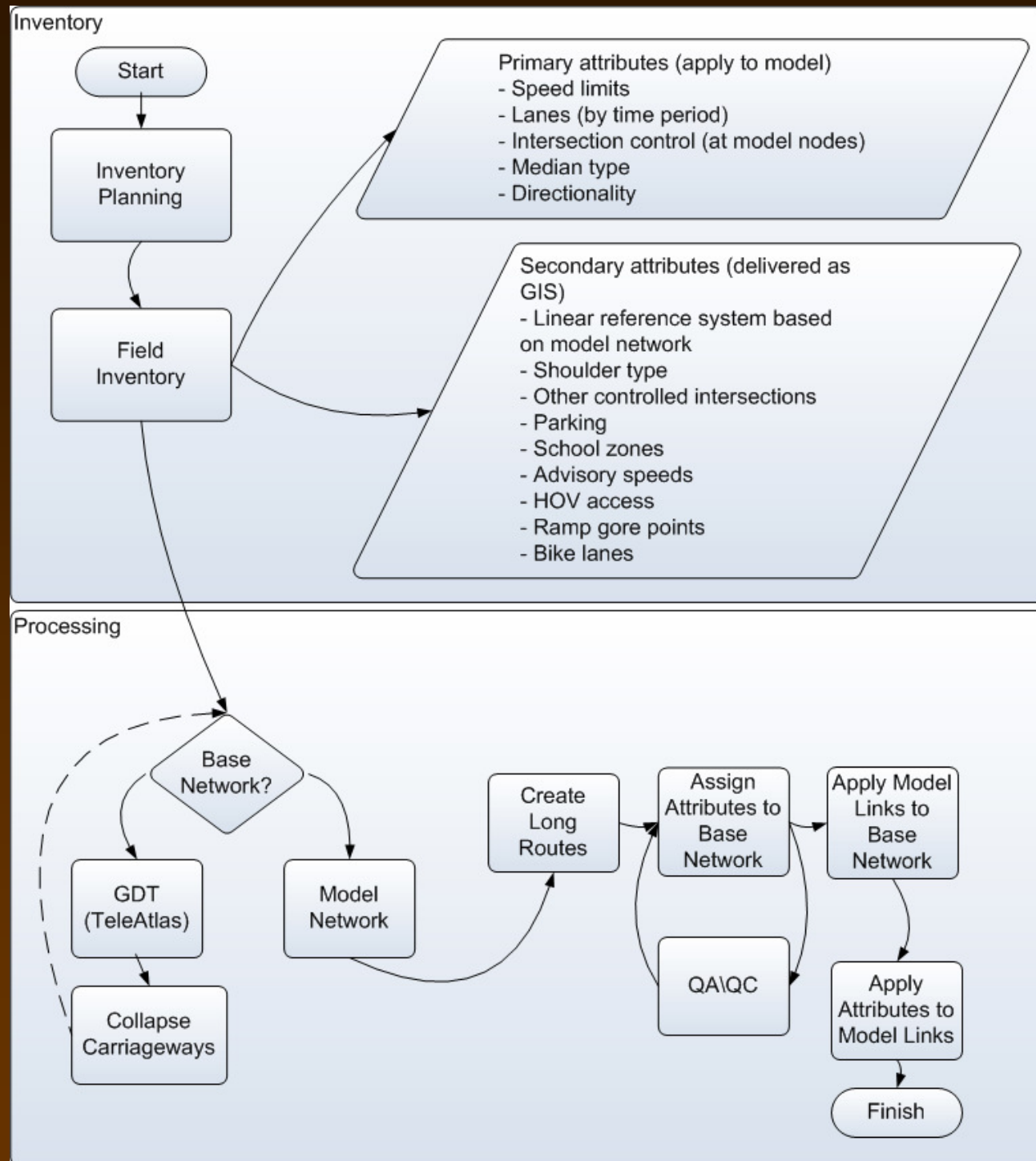
Presented to: Modeling Task Force



Steve Taylor, P.E., PTOE
Project Manager
Jacobs Engineering Group
July 28, 2010

Agenda

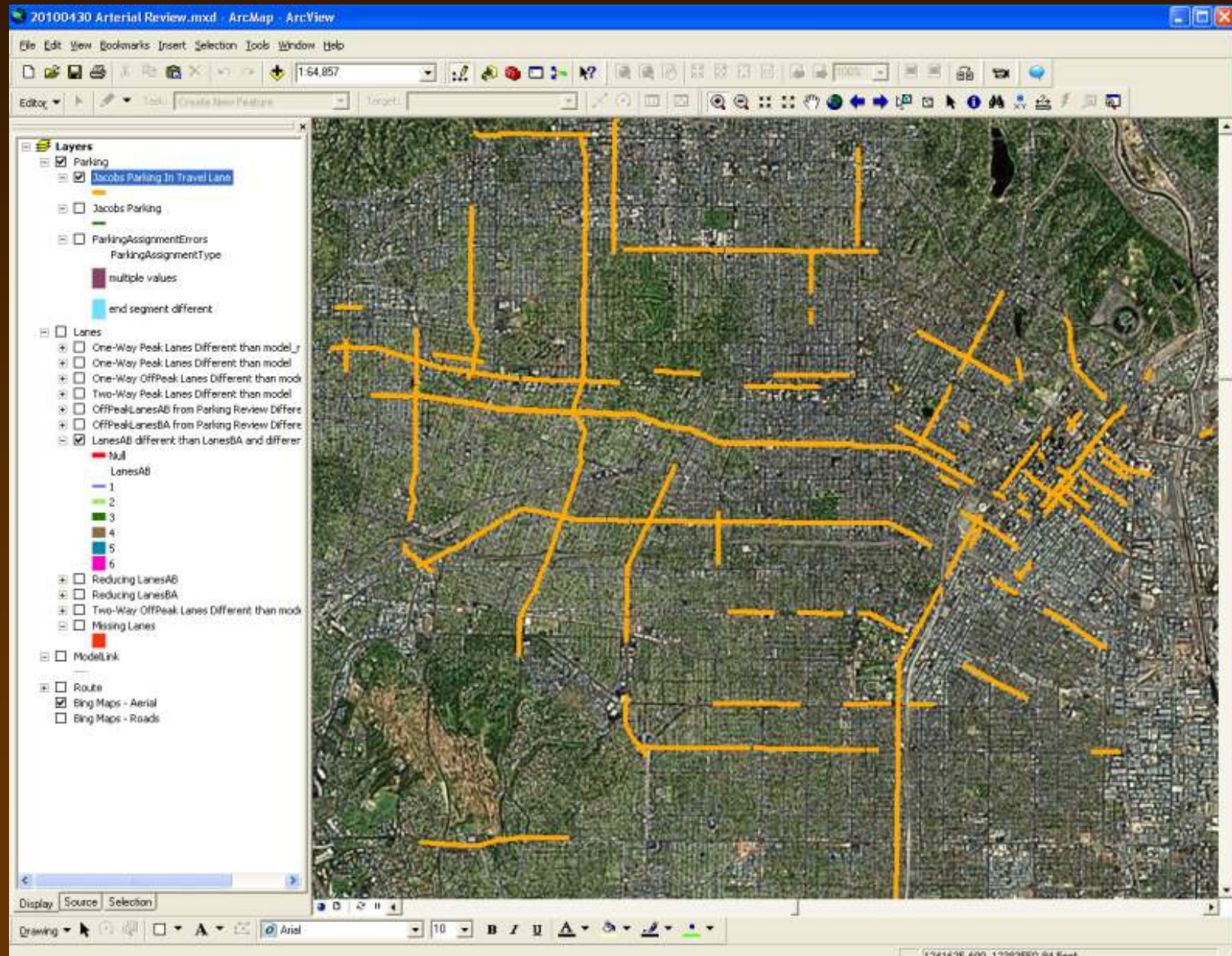
- Field Inventory
- Base Network ?
- Linear Reference System (LRS)
- QC Process



Field Inventory (Primary / Secondary)

- Network Included (over 16,000 centerline miles)
 - All Freeways
 - All Arterials
 - All Urban Major Collectors
- Primary Attributes (applied to model)
 - Speed Limits
 - Lanes (by time period)
 - Intersection Control (at model nodes)
 - Median Type
 - Directionality (1-way vs. 2-way)

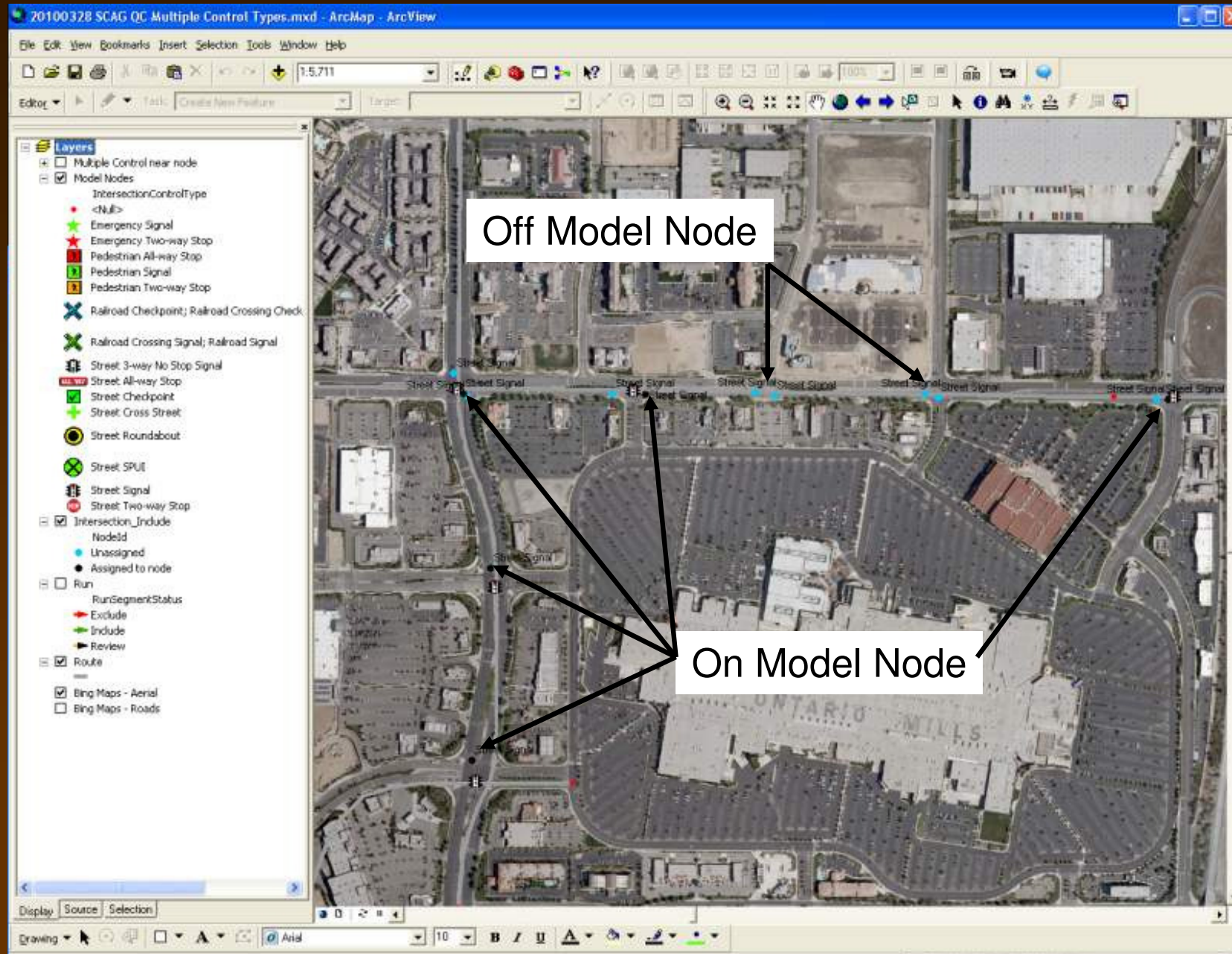
Field Inventory (Parking in Lanes)



Field Inventory (Primary / Secondary)

- Secondary Attributes (delivered as GIS)
 - LRS based on model network
 - Shoulder Type
 - Other Controlled Intersections
 - Parking
 - School Zones
 - Advisory Speeds
 - HOV Access
 - Ramp Gore Points
 - Bike Lanes

Field Inventory (Controlled Intersections – On/Off Model Nodes)



Field Inventory Tool

Carter & Burgess LRS Assessment

Emulating GPS

Route Name: Freeway 0

Video Filename:

User

In

Out

Pan

Location

F1

Down

Divide

F2

F3

Entra

F4

4

F5

65

F6

F7

F8

Pave

F9

Down

F10

Down

Direction	Collection Time	Gore Type	Side of Road	Lane Configuration	Cross Street	Comment
Forward	21:55:55.668	Entrance	Right	Merqe		
Forward	21:54:48.902	Exit	Right	Drop Lane		
Forward	21:54:25.293	Entrance	Right	Merqe		

Route Name

Median

Ramp Gore

Lanes

Speed Limit

Advisory Speed Zone

Construction Zone

Freeway Shoulder

HOV Lane

Miscellaneous

Windows Media Player

File

View

Play

Tools

Help

10:46:42AM

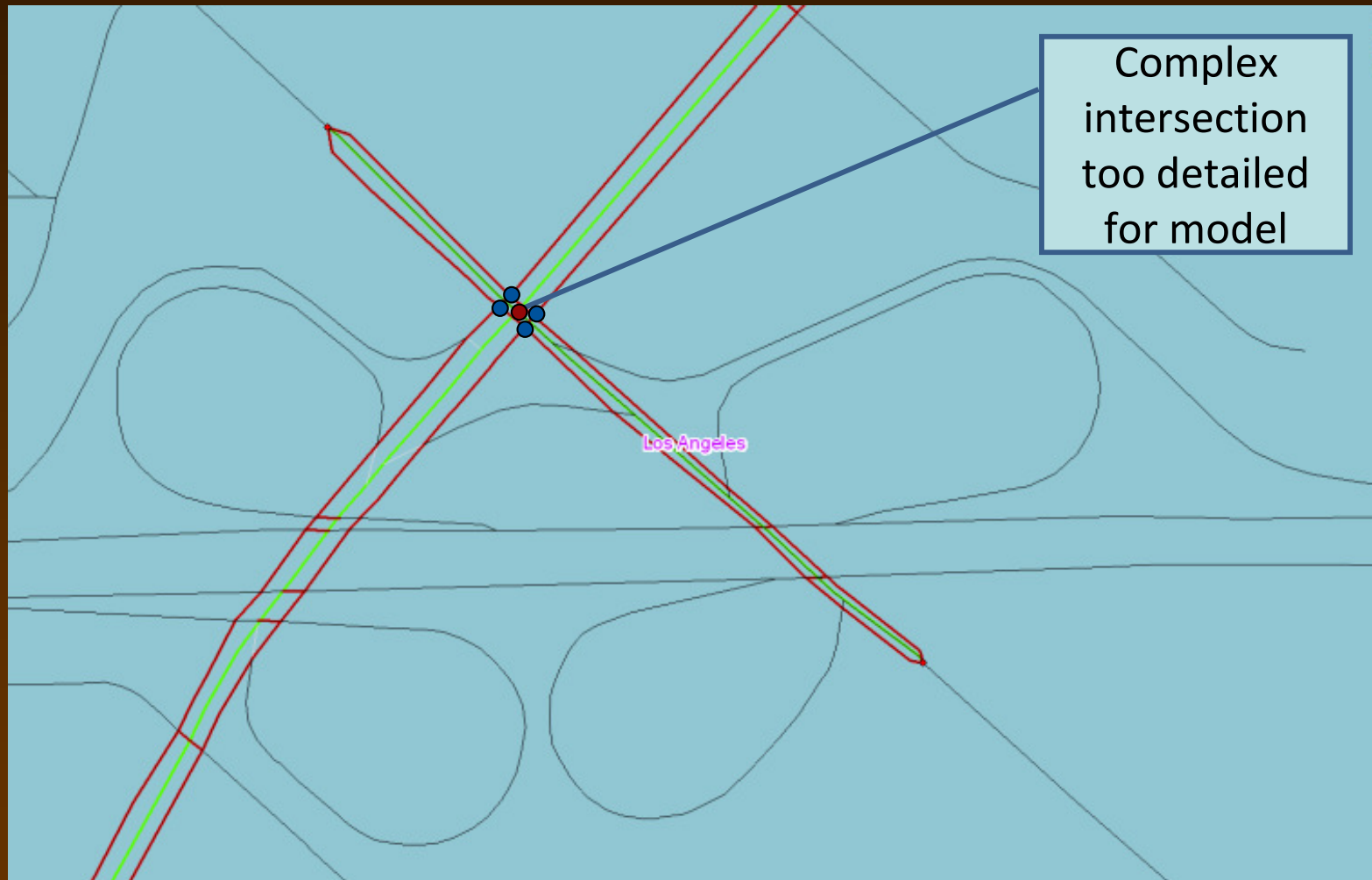
JUL 10 2006

03:04 / 18:26

Base Network

- GDT (TeleAtlas)
- Benefits include annual updates through license agreement
- Challenges
 - includes extra links / nodes not represented in model
 - Need to “collapse carriageways”
 - Current network
 - Each update

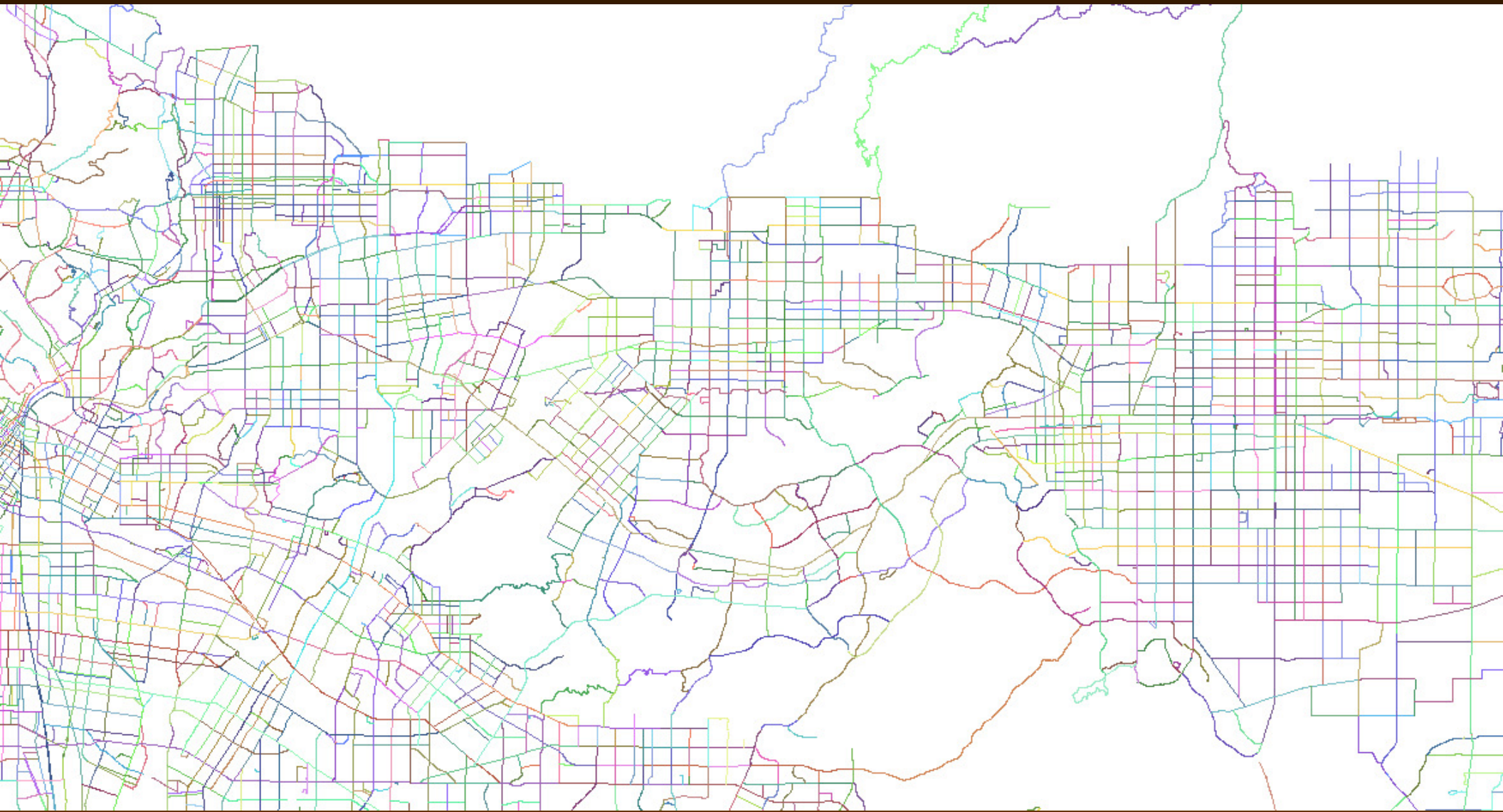
Base Network



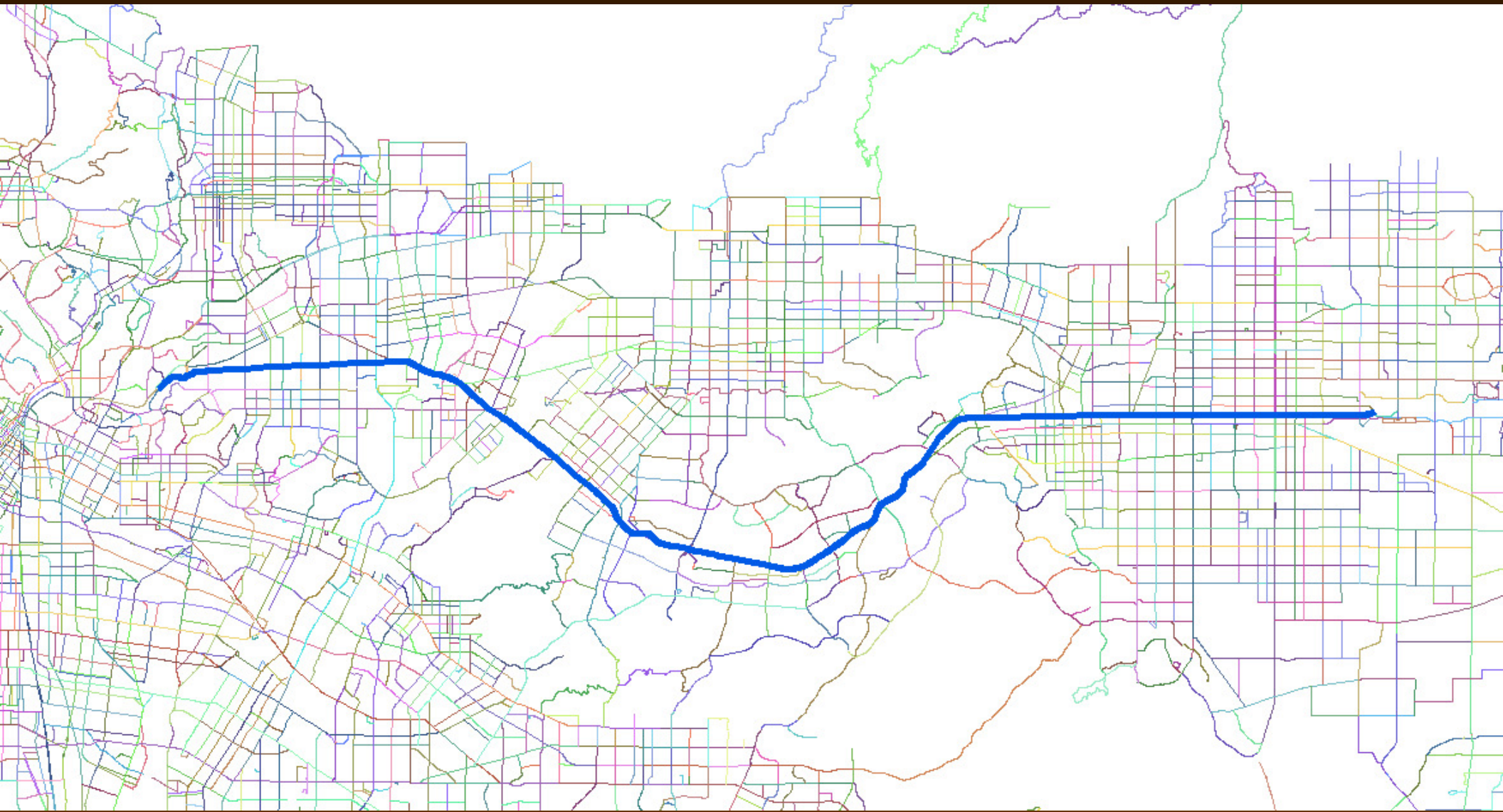
Linear Reference System (LRS)

- Model Network
 - Create Long Routes
 - Assign Routes
 - Measure Routes
 - Assign Routes / Measures to Collected Attributes
 - Apply Collected Attributes to Model Links

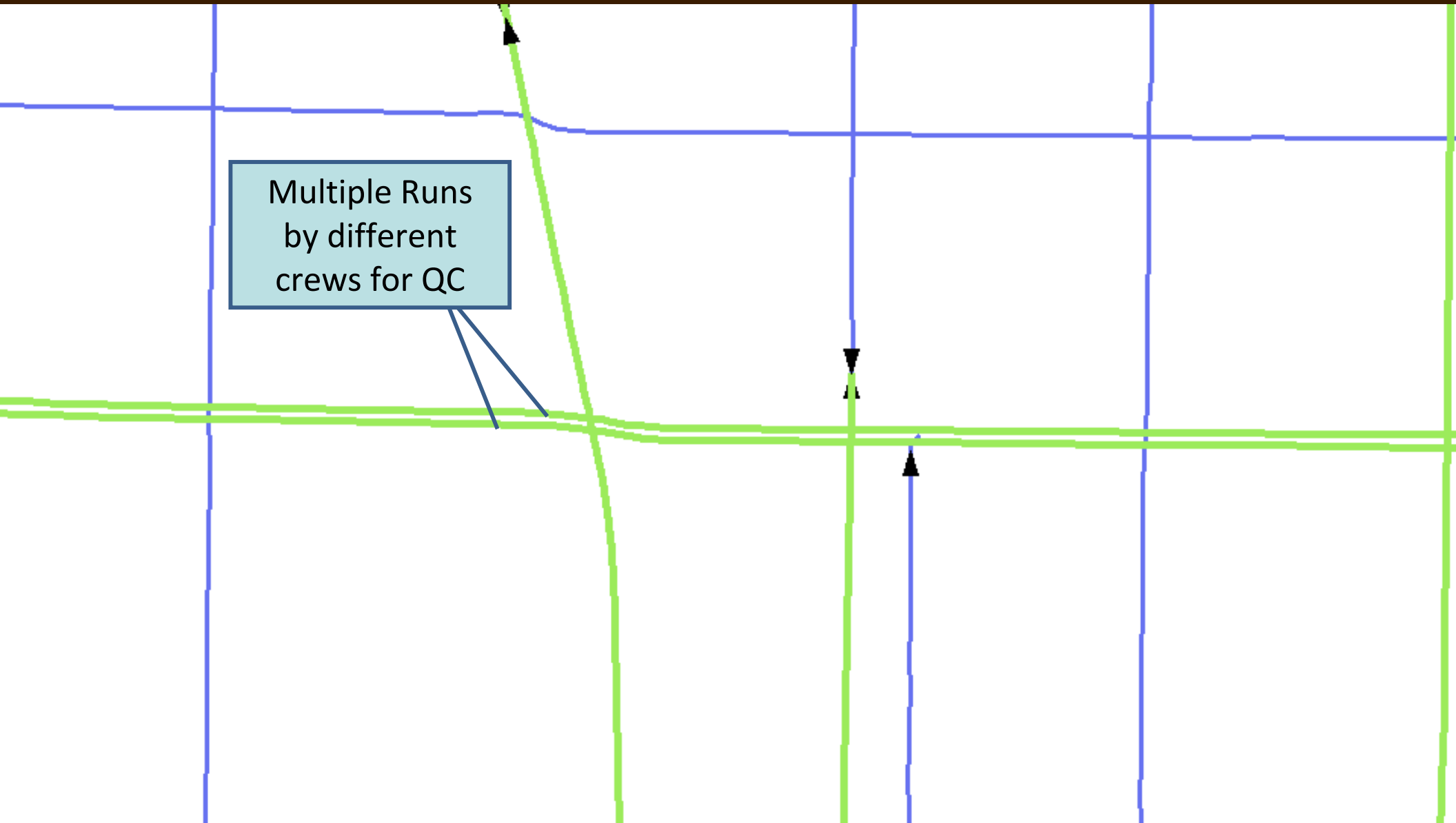
Linear Reference System (LRS)



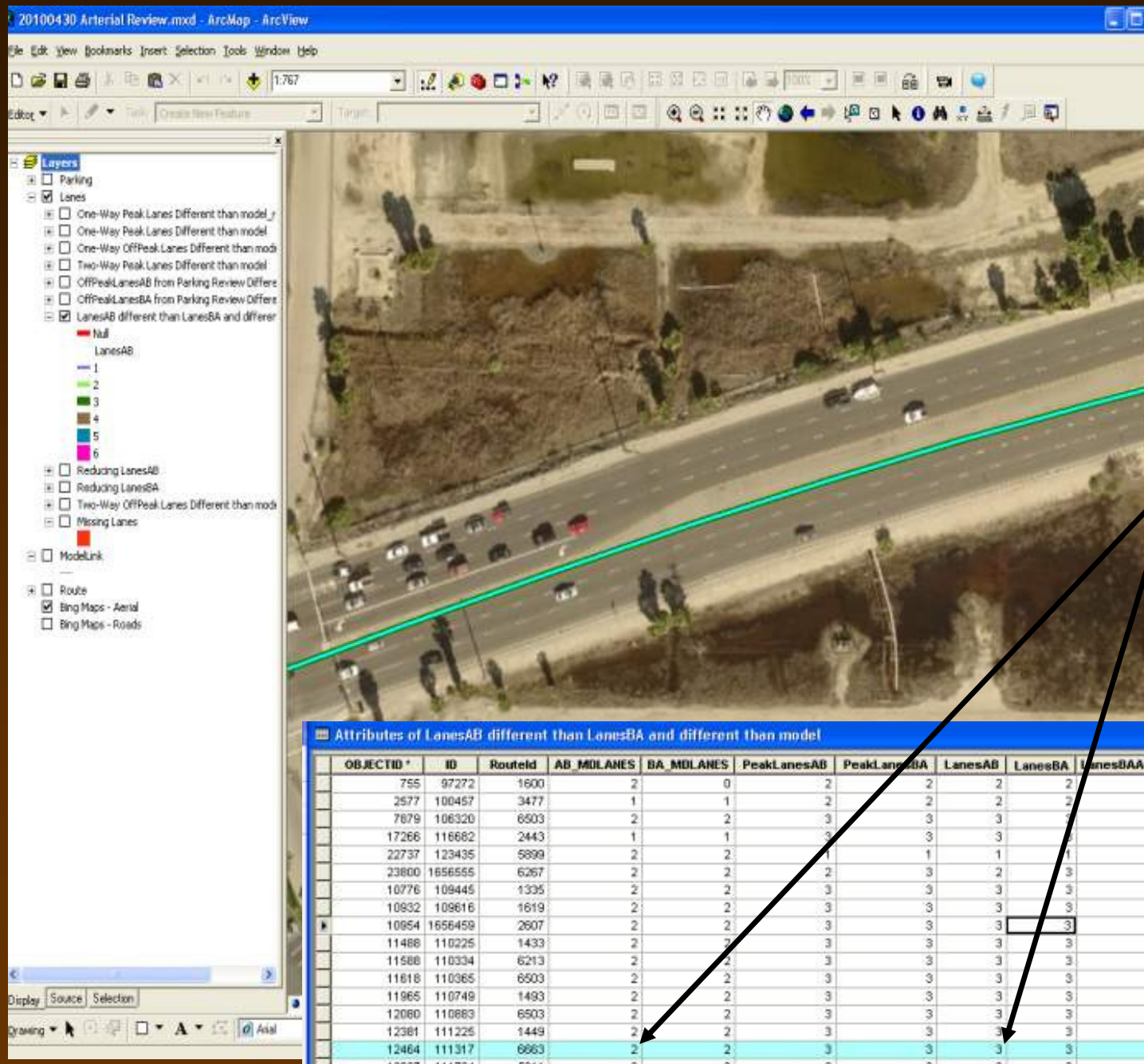
Linear Reference System (LRS)



QC Process



QC Process



Model vs Field Inventory
Verify all links that
are different

Questions ???

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